WPDES PERMIT

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

General Mitchell International Airport

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility located at
5300 South Howell Ave
to
Milwaukee River Basin (Kinnickinnic River via. Wilson Park Creek, Root River Basin (Oak Creek), and the groundwater in these basins)

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after this expiration date an application shall be filed for reissuance of this permit, according to Chapter NR 200, Wis. Adm. Code, at least 180 days prior to the expiration date given below.

State of Wisconsin Department of Natural Resources
For the Secretary

By _____
Nate Willis, Wastewater Engineer
Bureau of Water Quality

_____
Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE – May 01, 2022 **EXPIRATION DATE – April 30, 2027**

TABLE OF CONTENTS

1 Applicability

1.1 Permitted Area

This permit covers areas at General Mitchell International Airport within the jurisdiction of Milwaukee County, contributing to discharges from the airport's separate storm sewer system. Separate storm sewer system means a conveyance or system of conveyances including storm sewers, roads with drainage systems, roadways, catch basins, curbs, gutters, ditches, constructed channels or storm drains. For the purposes of this permit, the permitted area is defined as the fenced-in areas of the airport. This permit does not cover airport operations located outside of the fenced-in areas such as parking lots.

1.2 Responsibilities

Milwaukee County, as the owner and airport authority, shall be the permittee, and shall coordinate the activities of the airport tenants to achieve permit compliance. Milwaukee County is responsible for supervising airport tenants on the following:

(a) Compliance with permit conditions relating to discharges from the separate storm sewer system

(b) Storm water pollution prevention plan implementation on portions of the separate storm sewer system within the permitted area

(c) Collection of monitoring data required in section 5.

(d) Compliance with annual reporting requirements as specified in section 3.5.

2 Authorized Discharges

2.1 Storm Water Discharges - General

This permit authorizes storm water point source discharges to waters of the State from the separate storm sewer system in the permitted area.
This permit authorizes the discharge of storm water associated with industrial activity as specified in s. 2.2. Stormwater flows may be commingled with flows contributed by industrial wastewater sources outlined in s. 2.2, provided such discharges are regulated under this or other WPDES permits or are not significant sources of pollutants. Outfalls 003 and 007 have several drainage basins and storm water inflow points associated with them, including inflows from off site of the permitted area. Outfall 003 is located in a channelized ditch with continuous flow (flow occurs during dry weather periods) and is a tributary to the Oak Creek. Outfall 007 is the confluence of two large concrete-enclosed storm sewers which also has continuous flow and is part of Wilson Park Creek tributary to the Kinnickinnic River.

2.2 Industrial Wastewater & Storm Water Discharges

This permit regulates both industrial storm water discharges (outside wet weather/precipitation discharges) as well as industrial wastewater discharges (dry weather discharges) to the airport's separate storm sewer system. These discharges include the following:

(a) Deicing and anti-icing activities (Outfalls 001, 003, and 007)

(b) Oil/Water separators (Sampling Point 101)

(c) Snowmelters (Sampling Points 105 and 106)

2.3 Prohibited Discharges

Discharges of pollutants to the separate storm sewer system are prohibited, unless the discharge is an industrial storm water discharge or industrial wastewater discharge authorized from the five activities identified in section 2.2 or a source listed in section 2.4 (d) or allowed under a separate WPDES permit. To eliminate prohibited discharges, the permittee shall do all of the following:

(a) Maintain adequate authority to prevent prohibited non-storm water discharges from its tenants and enforce sanctions when prohibited non-storm water discharges occur.

(b) Send copies of the fact sheet and permit to the tenants and companies that directly manage the activities regulated under this permit and further notify each tenant or management company of prohibited discharges and the operational requirements in this permit.

(c) Evaluate all separate storm sewer system outfalls for prohibited discharges and illicit connections. Methods may include a review of as-built schematics or drainage plans of the storm water collection system, end of pipe screening during dry weather, dye testing, physical inspection of the storm water collection system, or other appropriate monitoring methods. The methods shall be identified in a written document explaining how this evaluation will be completed, the equipment used for investigation and the rationale for investigatory methods. Continued inspections for prohibited non-storm water discharges shall be completed at least once annually, and the results documented and submitted to the department with the corresponding End of Season Annual Summary. See s. 7.3.

2.4 Exclusions

Excluded from coverage under this permit are the following:

(a) Areas located on General Mitchell International Airport property, which are segregated from the industrial activities associated with the airport not requiring storm water pollution prevention, such as office building, parking lots, and undeveloped areas.

(b) Pollutants from areas off site or upstream from the permitted area which discharge into the separate storm sewer system. However, the permittee is required to monitor and track the pollutants coming into the system through Sampling Point 701.

(c) Non-storm water discharges, as listed below, that are not considered illicit discharges, unless identified by either the permittee or the department as a significant source of pollutants to waters of the State.

1. Landscape irrigation
2. Diverted stream flows
3. Uncontaminated ground water infiltration
4. Uncontaminated pumped ground water
5. Discharges from potable water sources
6. Foundation drains
7. Air conditioning condensate
8. Irrigation water
9. Lawn watering
10. Individual private vehicle washing
11. Flows from riparian habitats and wetlands
12. Fire fighting

3 Storm Water Pollution Prevention Plan

3.1 Implementation

The permittee shall implement a Storm Water Pollution Prevention Plan (SWPPP) in accordance with s. NR 216.27, Wis. Adm. Code. If the SWPPP does not include glycol management controls and other practices that comply with this permit, the SWPPP shall be updated to comply with the requirements of this permit. If there is a change in operations, the permittee shall incorporate those changes into the SWPPP. The SWPPP shall address glycol management controls and shall be updated and revised as necessary to comply with the glycol capture goal. If the glycol capture goal is not attained for a deicing season, the permittee shall take the necessary measures and amend the SWPPP to meet the goal the next deicing season per section 3.2.

3.2 Failure to Meet Glycol Capture Goal

If the permittee fails to meet the annual glycol capture goal for a deicing season, an amendment to the storm water pollution prevention plan shall be submitted to the department proposing additional efforts or changes. The next season's monitoring shall evaluate the success of the additional efforts or changes.

3.3 Deicing and Anti-icing Infrastructure and Technology

The permittee shall continue to make progress to become a full deicing pad airport, with dedicated deicing pad facilities located throughout the permitted area. The use of a glycol blending station and hybrid deicing equipment to improve glycol conservation efforts shall be utilized whenever possible.

The permittee may continue to use temporary equipment, including the frac-tanks for storing captured glycol runoff and sewer balloons, as part of its practices to maximize the capture glycol runoff that is collectable.

The permittee shall review other deicing or anti-icing chemicals and emerging glycol recovery technologies on an annual basis and submit the results of this review with the End of Season Annual Summary.

The permittee shall update the department on an annual basis regarding the steps that are being taken to convert the airport into a full deicing pad airport. These updates shall be provided in the End of Season Annual Summary.

Facilities for glycol controls must receive department plan approval if they fall under the description of a reviewable wastewater treatment system project, in accordance with ch. NR 108, Wis. Adm. Code at least 90 days prior to the start of construction. Submit plans for any wastewater storage structures, sewer system modifications, temporary pilot systems, or any other runoff management facilities that would be reviewable. Allow 90 days for department approval of the plans, prior to construction.

3.4 Annual Inspection

The permittee shall perform a comprehensive annual airport site inspection. The inspection shall verify that the site drainage conditions and potential pollution sources identified in the storm water pollution prevention plan remain accurate, that the best management practices prescribed in the plan are being implemented, and are properly operated, and maintained. Document the date of inspection, inspector, summary of observations, and if any amendments are needed to the storm water pollution prevention plan. The inspection shall be conducted during the deicing season when deicing and anti-icing activities are occurring to observe the management practices.

3.5 End of Season Annual Summary

The permittee shall prepare an End of Season Annual Summary, consisting of items (a) through (n) listed below, and any other information in support of documenting permit compliance. The summary shall consist of a written report, submitted no later than September 30th.

(a) An update on the glycol management including information on glycol collection, storage, disposal, usage amounts, pollutant loadings, fugitive amount, recovery efficiency, conservation practices, weather conditions, and operational issues. See subsection 6.2.2.4 of this permit for more information on the level of detail regarding pollutant loading that should be submitted.

(b) The calculation of the annual glycol capture goal, and a comparison to the actual percentage recovered.

(c) Site map revisions where necessary to identify of any new outfalls, sampling points, structural controls, or other noteworthy changes in the storm water pollution prevention plan.

(d) Summary of weather events and related aircraft activity for the season. This summary shall include: a narrative description of each storm event which is sampled, including the date and duration of the storm, precipitation amount (if snowfall include inches of snow and rainfall equivalent), an estimate of the total volume of storm water discharged, and estimated amount of Type I ADF applied per aircraft.

(e) Assessment of the effectiveness of best management practices, and whether any amendments are proposed to the storm water pollution prevention plan to address operational issues.

(f) Describe what follow-up was taken in response to any issues identified in the annual inspection, the visual inspections at all influent, in-plant, and outfall sampling points, and the non-storm water discharge inspection.

(g) A summary of the monitoring data collected from Sampling Points 601, 701, 105, 106, 107, 001, 003, and 007, along with the length of the deicing season. The deicing season begins once deicing products are applied to aircraft and ends when deicing products are no longer being applied to aircraft. The summary should specify the week that the deicing season started and the week that the deicing season ended. The week that the deicing season begins is the first week in which any deicing fluid is used for two or more consecutive days. The visual inspection notes do not have to be submitted (retain them on site), but in instances where unusual or unexpected observations were noted, summarize what was observed and the suspected cause.

(h) Observations on receiving water quality improvements or degradation resulting from airport activities.

(i) A general fiscal summary of the deicing season expenditures for the permittee's storm water prevention plan, which includes the following:

1. The expenditures for the deicing season with a breakdown of expenses for the major components.
2. The budget for the upcoming deicing season with a breakdown of expenses for the major components.

(j) The permittee shall certify the airport does not use airfield deicing products that contain urea, in accordance with 40 CFR Part 449.10.

(k) Summary of current alternative deicing chemicals and emerging glycol recovery technologies.

(l) Progress report on the steps being taken to convert the airport into a full deicing pad airport.

(m) Summary of BMPs that have been implemented in the SWPPP and progress that has been made on total suspended solids and phosphorus reductions at the airport with respect to the Milwaukee River Basin TMDL.

4 Influent Requirements

4.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	**Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**
601	Sample Point: Downstream surface water monitoring located approximately 5 miles downstream from Outfall 007. Sampling station is at Wilson Park Creek just before the confluence with the Kinnickinnic River, and across from St. Luke's Hospital.
701	Sample Point: Inflow monitoring of discharges ("Upstream") to Wilson Park Creek and the airport's storm sewer system that are from areas outside the airport (the City of Cudahy and Wisconsin Air National Guard 128th on the east central side of the airport).

4.2 Monitoring Requirements

The permittee shall comply with the following monitoring requirements.

4.2.1 Sampling Point 601 – Wilson Park Creek at St. Luke's

Monitoring for this downstream sampling point is only required during weeks where deicing or anti-icing activities are occurring, and shall be conducted at the same time as sampling at outfalls 001 and 007.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	See Permit Note	Estimated	See s. 4.2.3.1
Dissolved Oxygen		mg/L	See Permit Note	Grab	See s. 4.2.3.1
COD		mg/L	See Permit Note	Grab	See s. 4.2.3.1
BOD5, Total		mg/L	See Permit Note	Calculated	See s. 4.2.3.1
Propylene glycol		mg/L	See Permit Note	Grab	See s. 4.2.3.1

4.2.2 Sampling Point 701 - Inflow at Bailey's Pond

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	See Permit Note	Estimated	See s. 4.2.3.1
COD		mg/L	See Permit Note	Composite	See s. 4.2.3.1
BOD5, Total		mg/L	See Permit Note	Calculated	See s. 4.2.3.1
Suspended Solids, Total		mg/L	See Permit Note	Composite	See s. 4.2.3.1
pH Field		su	See Permit Note	Grab	See s. 4.2.3.1
Dissolved Oxygen		mg/L	See Permit Note	Grab	See s. 4.2.3.1
Phosphorus, Total		mg/L	See Permit Note	Composite	See s. 4.2.3.1
Chlorine, Total Residual		ug/L	See Permit Note	Grab	See s. 4.2.3.1
Chloride		mg/L	See Permit Note	Composite	See s. 4.2.3.1
Hardness, Total as CaCO3		mg/L	See Permit Note	Composite	See s. 4.2.3.1
Copper, Total Recoverable		ug/L	See Permit Note	Composite	See s. 4.2.3.1
Zinc, Total Recoverable		ug/L	See Permit Note	Composite	See s. 4.2.3.1

4.2.3 Monitoring Special Conditions

4.2.3.1 Monitoring Frequency Requirement

The following requirements apply to collecting samples when sampling is conducted:

The following requirements apply to collecting samples when sampling is conducted:

(a) Samples shall be collected that are representative of the winter deicing runoff events.

(b) Monitoring locations shall be sampled during the same 4-day snow removal period. Sampling Point 701 and Outfall 007 samples shall be collected on the same day.

(c) For the parameters identified in this section, the permittee shall submit one sampling result for every 4 days of active snow removal, up to 10 samples in a given deicing season.

a. Flow Rate
b. COD
c. BOD5, Total
d. Suspended Solids, Total
e. pH Field
f. Dissolved Oxygen
g. Phosphorus, Total
h. Propylene glycol

(d) For the parameters identified in this section, the permittee shall submit one sampling result for every 4 days of active snow removal, up to 6 samples in a given deicing season.

a. Chlorine, Total Residual
b. Chloride
c. Hardness, Total as CaCO3
d. Copper, Total Recoverable
e. Zinc, Total Recoverable

(e) Samples shall be representative of the deicer runoff. A sample shall be collected during a 30-minute period. A minimum of 3 sample portions, evenly spaced throughout the 30-minute sampling period, shall be collected for a composite sample. As an alternative, a "flow weighted composite" sample for the entire storm water event may be collected. In addition, a grab sample shall be collected within the first 30 minutes of the runoff for those parameters being analyzed that require a grab sample.

(f) A narrative description shall be provided of each storm event which is sampled, including the date and duration of the storm, precipitation amount (if snowfall include inches of snow and rainfall equivalent), and an estimate of the total volume of storm water discharged. These narrative descriptions shall be retained and included in the End of Season Annual Summary (see section 3.5).

(g) Approved analytical methods shall be used in accordance with ch. NR 219, Wis. Adm. Code "Analytical Test Methods and Procedures", or guidance on storm water sampling procedures developed by the department. When no analytical method is approved, a suitable method may be used provided a description of the method is submitted to the department for concurrence prior to sampling.

(h) Additional samples may be collected as necessary for data collection at the permittee's discretion. This additional data shall be reported to the department via the End of Season Annual Summary.

4.2.3.2 Pollutant Loading

The permittee shall estimate the annual pollutant loading from spent deicing and anti-icing chemicals discharged from the permitted area into the storm sewer system. Data shall be maintained on the following and reported in the End of Season Annual Summary:

(a) The amount and type of deicer or anti-icer used each deicing season reporting period (100% product).

(b) The estimated amount of glycol captured by glycol management practices and deicing pads (100% product).

(c) The estimated amount of glycol discharged in runoff to the separate storm sewer system, with a brief description on the how the estimate was calculated (100% product). The estimated volume of storm water discharged from Outfalls 001, 003, and 007, with a brief description on how the estimate was calculated.

(d) The weather conditions that required deicing or anti-icing, to determine the correlation between the weather and amount of deicer and anti-icer used.

(e) The air traffic, to determine the correlation between air traffic and amount of deicer and anti-icer used. The permittee may determine what the relevant air traffic data is.

4.2.3.3 Upstream and Downstream Sampling Procedure

Approved analytical methods shall be used in accordance with ch. NR 219, Wis. Adm. Code "Analytical Test Methods and Procedures", or guidance on storm water sampling procedures developed by the department. When no analytical method is approved, a suitable method may be used provided a description of the method is submitted to the department for concurrence prior to sampling.

4.2.3.4 Upstream and Downstream Visual Inspections

Visually inspect the sampling points listed in table 4.1 to characterize the quality of storm water going into the airport and downstream of the airport during the "first flush" of storm water runoff from representative storms or snow melts. Observations shall be made within the first 30 minutes of when runoff first appears at the monitoring location, or as soon thereafter as practicable, runoff quality shall be characterized as any noticeable increases in observed color, odor, turbidity, floating solids, foam, oil sheen, or other indicators of storm water pollution. Documentation shall include the inspection date, inspector, summary of observations, and probable sources of observed storm water pollution.

4.2.3.5 BOD5

In calculating the 5-day biochemical oxygen demand concentration, the permittee shall use an established COD-BOD relationship approved by the department. The permittee may choose to further establish this relationship with additional BOD5 samples.

4.2.3.6 Grab Sampling

For any instance in which a composite sample is unable to be collected, the permittee may utilize a grab sample in accordance with the monitoring requirements identified above. The permittee shall indicate on the eDMRs whether any samples which are designated as "Composite" in this WPDES permit were collected as a Grab.

5 In-Plant Requirements

5.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	**Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)**
101	Milwaukee County hydrant fueling system pump station oil and water separator, which serves both the aviation and ground service equipment fueling areas.
105	Deicer-containing snow stockpiled from plowing the terminal ramp and surrounding concourses may be melted by a snowmelter to manage the size of snow piles in the fuel farm area (Mount Mitchell). Clean snow may be melted and discharged into a storm sewer inlet and discharge at Outfall 007 if the melt water complies with COD effluent limitations. The melted snow is not subject to any treatment.
106	Deicer-containing snow stockpiled from plowing the cargo ramp may be melted by a snowmelter to manage the size of snow piles (Runway 7R deicing pad area). Clean snow may be melted and discharged into a storm sewer inlet and discharge at Outfall 001 if the melt water complies with COD effluent limitations. The melted snow is not subject to any treatment.

5.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations.

NOTE: Other previous oil-water separators operated by airport tenants were included in this section of the permit. The department has determined that these oil-water separators are best covered by the Petroleum Contaminated Water General Permit (WI-0046531-06-1). Those tenants will need to apply for general permit coverage in order to continue to discharge from those oil-water separators.

5.2.1 Sampling Point 101 - Hydrant Fuel Farm Oil & Water Separator

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gpd	Quarterly	Estimated	
Oil & Grease (Hexane)	Daily Max	15 mg/L	Quarterly	Grab	
Suspended Solids, Total	Daily Max	40 mg/L	Quarterly	Grab	
BOD_5, Total	Monthly Avg	20 mg/L	Quarterly	Grab	
BETX, Total	Monthly Avg	750 µg/L	Annual	Grab	
PAHs	Monthly Avg	0.1 µg/L	Annual	Grab	See subsection 5.2.2.5 for 'PAH Group of Ten' calculation procedure.
Benzo(a)pyrene	Monthly Avg	0.1 µg/L	Annual	Grab	
Naphthalene	Monthly Avg	70 µg/L	Annual	Grab	

5.2.2 Oil Water Separator Requirements

All requirements in this section apply to the oil water separators regulated under this permit.

5.2.2.1 Applicability

Permittees may discharge into the separate storm sewer system treated storm water discharged from oil and water separators, in accordance with the conditions in this section. The following tenants are operators of oil and water separators at General Mitchell International Airport:

- Milwaukee County hydrant fueling system pump station
- Signature Flight Support
- Textron Aviation
- Any other tenant with an oil and water separator

5.2.2.2 Flow Estimate

The permittee shall estimate the daily average flow rate of the discharge per sampling event. The flow rate may be estimated by the readings of a water meter on the discharge, readings from a calibrated pump handling the discharge, the total gallons pumped divided by the operating period of the pump per day or any other approved flow estimating methods in s. NR 218.04(15), Wis. Adm. Code.

5.2.2.3 Grab Sample

A grab sample means a single sample taken at one moment of time or a combination of several smaller samples of equal volume taken in less than a two-minute period. Samples shall be collected from oil and water separator effluent prior to discharge to the separate storm sewer system, from each of the oil and water separators at the airport (except those connected to the sanitary sewer).

5.2.2.4 Total BETX

Total BETX shall include a summation of the following individual compounds: benzene, ethylbenzene, toluene and total xylenes.

5.2.2.5 PAH Group of Ten

The permittee shall use EPA test method 610 or other EPA approved method to test for the PAH compounds. The permittee shall demonstrate compliance with the monthly average PAH group limit by reporting no detection of any of these PAH compounds, or by reporting the sum of the PAH group detected amounts equal to or less than 0.1 µg/L. The polycyclic aromatic hydrocarbons (PAHs) shall include a summation of the following ten individual compounds: benzo(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene.

In determining compliance with the PAH limit of 0.1 µg/L, the permittee shall use the toxicity equivalent factor (TEF) shown in the table below. For calculating the concentration for the PAH group of 10, multiply the concentration of each PAH compound by the corresponding TEF value and the sum the results. For results < LOD, a zero may be used for the concentration.

Toxicity Equivalent Factors for PAH Compounds

PAH Compounds	TEF – Toxicity Equivalent Factor
Benzo(a)anthracene	0.1
Benzo(b)fluoranthene	0.1
Benzo(g,h,i)perylene	0.01
Benzo(k)fluorathene	0.01
Chrysene	0.001
Dibenzo(a,h)anthracene	1
Fluoranthene	0.001
Indeno(1,2,3-cd)pyrene	0.1
Phenanthrene	0.001
Pyrene	0.001

5.2.2.6 Benzo(a)pyrene

The PAH compound benzo(a)pyrene is regulated separately. The permittee shall use EPA test method 610 or other EPA approved method to test for benzo(a)pyrene. The permittee shall demonstrate compliance with monthly average benzo(a)pyrene limit by reporting no detection of benzo(a)pyrene, or by reporting a detected amount equal to or less than 0.1 µg/L.

5.2.2.7 Naphthalene

The PAH compound naphthalene is regulated separately. The permittee shall use EPA test method 610 or other EPA approved method to test for naphthalene. The permittee shall demonstrate compliance with monthly average naphthalene limit by reporting no detection of naphthalene, or by reporting a detected amount equal to or less than 70 µg/L.

5.2.2.8 Design Requirements

The oil and water separator shall have sufficient capacity to contain all wastewater discharges and any precipitation resulting from a 10-year, 24-hour storm event, which falls within or flows into the area of disposal or treatment. Plans and specifications for any new oil and water separator shall be submitted to the department prior to construction in accordance with ch. NR 108, Wis. Adm. Code.

5.2.2.9 Operating Requirements

Permittees shall comply with the following:

(a) The oil and water separator treatment controls for petroleum contaminated storm water runoff shall be adequately sized, designed, operated and maintained.

(b) Oil and water separators shall only be used to treat petroleum contaminated storm water runoff. No material (e.g., waste oil or petroleum products contaminated with minor amounts of water) shall be intentionally placed into the system for treatment or storage. All product spills shall be removed from the oil and water separator as soon as is practicable.

(c) Accumulated solids, oil and grease shall be removed on a periodic basis to maintain the hydraulic capacity of the oil and water separator and prevent the carryover of the oil and grease. The water discharge side of the separator (effluent chamber) shall be maintained; there shall be no oil sheen or scum on the water or oil accumulation on the equipment. All removed substances shall be properly disposed of (paragraph 4.2.1.10).

(d) There shall be no leakage from any containment berms, dikes or tanks.

(e) The oil and water separator shall be inspected at least monthly for proper operation.

(f) Document the volume of waste oil recovered, date of removal, who removed it, and the ultimate fate of the waste oil.

(g) For all petroleum storage tanks, submit in the End of Season Annual Summary (section 3.5) the following information:

1. Method used to handle and dispose of petroleum storage tank condensate, the volume of condensate discharged, and the frequency of the discharge.

(h) If petroleum storage tank condensate is discharged, the condensate shall be analyzed for benzene, ethylbenzene, lead (if lead additives are used), total phenols, toluene, and xylene. Detection of any of the above parameters in the condensate may result in a determination by the department that the discharge is not allowable if it is a significant source of pollutants.

5.2.2.10 Disposal of Waste Oil and Solids

Waste oil and solids removed from the oil and water separator shall be disposed of at a site or operation licensed by the department under chs. NR 500 to 522, Wis. Adm. Codes (solid waste regulations), or chs. NR 600 to 685, Wis. Adm. Codes (hazardous waste regulations). The following documentation shall be maintained on-site regarding the removal and disposal of these wastes: (a) the amount removed, (b) date of removal, (c) person or company who hauled the waste, and (d) disposal site for the waste. A summary of each year's waste removal and disposal shall be submitted with the end of season annual summary (subsection 3.5).

5.2.2.11 Secondary Containment Water

Water that has collected in secondary containment structures at fuel farm storage facilities that consists solely of storm water that has not been mixed with other waste streams, is clean fire suppression water, or other uncontaminated water, can be discharged to groundwater or surface water without treatment provided the following conditions are met:

(a) Upon visual inspection, the wastewater contains no visible oil sheen or film.

(b) The bypass valve is normally sealed close.

(c) The bypass valve is opened after the visual inspection and resealed following drainage of the containment structure.

(d) Records of all discharges of this wastewater and the results of the visual inspections and chemical monitoring are maintained on-site for department inspection.

(e) The discharge flow rate is controlled to prevent erosion and the addition of sediment or turbidity from entering the receiving water.

(f) A representative discharge is monitored once during the first year after coverage under the permit is granted, for the parameters specified in Table 4.2.1. If the concentrations are less than the effluent limits, the discharge of secondary containment water is allowed and additional chemical monitoring is unnecessary for the term of the permit.

Wastewater that has collected in secondary containment structures at fuel farm storage facilities that does not meet the uncontaminated conditions described above, shall be treated and monitored in accordance with table 4.2.1.

If the secondary containment water meets the conditions for a discharge that doesn’t require treatment, but is conveyed through the oil/water separator and/or discharged from the sampling point for the oil/water separator, the monitoring requirements and limitations in tables 4.2.1, do not apply.

5.2.3 Sampling Point 105 - Terminal Ramp Snowmelt; 106- Cargo Ramp Snowmelt

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gpd	Daily	Estimated	
COD, Filtered	Daily Max	271 mg/L	Daily	Grab Comp	
COD, Filtered	Monthly Avg	154 mg/L	Daily	Grab Comp	

5.2.3.1 Flow Estimate

Estimate means a reasonable approximation of the average daily flow. If in operation, the average daily flow of the discharge from snowmelters shall be the sum of the maximum hourly operating capacity for each unit for that day.

5.2.3.2 Grab Composite Sample

A grab composite sample means a combination of individual samples of equal volume taken at approximately equal intervals not exceeding one hour over a period of 3 hours. Samples shall be collected from the snowmelter effluent pipe prior to discharge to the separate storm sewer system.

5.2.3.3 COD

The COD sample shall be filtered to be representative of the soluble COD concentration in accordance with the procedures in Appendix A of 40 CFR Part 449.

5.2.3.4 Daily Sampling Requirement

The estimated flow rate and sampling for COD shall occur each day that the snowmelters are discharging.

5.2.3.5 Operating Requirements

The permittee shall comply with the following:

(a) The airport shall implement structural and operational best management practices to avoid snow contamination from aircraft deicing chemicals to minimize the discharge of pollutants to the outfalls.

(b) Snowplowing strategies shall be used to prevent deicing chemical entrainment in the snow, both aircraft deicing and anti-icing glycol and pavement deicers. Separate snow piles shall be created, one designated for clean snow and another for contaminated snow, segregated based on the presence of aircraft deicing glycol as noted visually by colored snow, or knowing whether the snow originated from an area where aircraft deicing occurred.

(c) The only snow that may be disposed of in the snowmelters is clean snow. Snow from the contaminated snow pile may only be disposed of in the snowmelters if snow is selectively removed from the upper portion of the snow pile after the snow pile has aged sufficiently to allow the glycol to migrate toward the bottom. If monitoring indicates non-compliance with the COD limits, the contaminated snow pile may not be feed into the snowmelter. Contaminated snow piles must be located on turf areas to prevent the runoff from entering the storm sewer system to the maximum extent practicable.

5.2.3.6 Disposal of Solids

The method of disposal of solids removed from the snowmelters shall be documented in the Storm Water Pollution Prevention Plan and prevented from entering the storm sewer system.

6 Surface Water Requirements

6.1 Sampling Point(s)

The discharge(s) shall be limited to the waste type(s) designated for the listed sampling point(s).

Sampling Point Designation	
Sampling Point Number	**Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)**
001	Sample Point/Outfall: Discharge of storm water runoff/industrial wastewater containing deicing fluids from the Cargo Ramp area to Wilson Park Creek tributary to the Kinnickinnic River. The outfall is located on the west side of the airport.
003	Sample Point/Outfall: Discharge of storm water runoff/industrial wastewater containing deicing fluids from the southern-most runways and taxiways to a tributary of Oak Creek. The outfall is located at the southeast corner of the airport at College Avenue.
007	Sample Point/Outfall: Discharge of storm water containing deicing fluids/industrial wastewater and groundwater infiltration from the terminal ramp area plus the runways and taxiways on the northcentral parts of the airport to Wilson Park Creek tributary to the Kinnickinnic River. The outfall is located at the northwest corner of the airport at Howell and Layton Avenues.

6.2 Monitoring Requirements and Effluent Limitations

The permittee shall comply with the following monitoring requirements and limitations.

6.2.1 Sampling Point (Outfall) 001 - Cargo Ramp Runoff to Wilson Park Creek

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	See Permit Note	Estimated	See ss. 6.2.5.1 and 6.2.5.2
COD		mg/L	See Permit Note	Composite	
BOD_5, Total		mg/L	See Permit Note	Calculated	See ss. 6.2.5.1 and 6.2.5.2
Suspended Solids, Total		mg/L	See Permit Note	Composite	Narrative Interim Limit. Effective immediately and applies year-round. See s. 6.2.3.
Suspended Solids, Total		lbs/day	See Permit Note	Calculated	Calculate the daily mass discharge of Total Suspended Solids in lbs/day on the same days sampling occurs.
pH Field	Daily Max	9.0 su	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2
pH Field	Daily Min	6.0 su	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Dissolved Oxygen		mg/L	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2
Phosphorus, Total		mg/L	See Permit Note	Composite	Narrative Interim Limit. Effective immediately and applies year-round. See s. 6.2.3.
Phosphorus, Total		lbs/day	See Permit Note	Calculated	Calculate the daily mass discharge of phosphorus in lbs/day on the same days sampling occurs.
Propylene glycol		mg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Chlorine, Total Residual		µg/L	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2
Chloride		mg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Hardness, Total as $CaCO_3$		mg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Copper, Total Recoverable		µg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Zinc, Total Recoverable		µg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Acute WET		TU_a	See Permit Note	Grab	See s. 6.2.5.4

6.2.2 Sampling Point (Outfall) 007 - Terminal Ramp Runoff to Wilson Park Creek

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	See Permit Note	Estimated	See ss. 6.2.5.1 and 6.2.5.2
COD		mg/L	See Permit Note	Composite	
BOD_5, Total		mg/L	See Permit Note	Calculated	See ss. 6.2.5.1 and 6.2.5.2
Suspended Solids, Total		mg/L	See Permit Note	Composite	Narrative Interim Limit. Effective immediately and applies year-round. See s. 6.2.3.
Suspended Solids, Total		lbs/day	See Permit Note	Calculated	Calculate the daily mass discharge of Total Suspended Solids in lbs/day on the same days sampling occurs.

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
pH Field	Daily Max	9.0 su	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2
pH Field	Daily Min	6.0 su	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2
Dissolved Oxygen		mg/L	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2
Phosphorus, Total		mg/L	See Permit Note	Composite	Narrative Interim Limit. Effective immediately and applies year-round. See s. 6.2.3.
Phosphorus, Total		lbs/day	See Permit Note	Calculated	Calculate the daily mass discharge of phosphorus in lbs/day on the same days sampling occurs.
Propylene glycol		mg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Chlorine, Total Residual		µg/L	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2
Chloride		mg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Hardness, Total as $CaCO_3$		mg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Copper, Total Recoverable		µg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Zinc, Total Recoverable		µg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Acute WET		TU_a	See Permit Note	Grab	See s. 6.2.5.4
Chronic WET		TUc	See Permit Note	Grab	See s. 6.2.5.4
PFAS		ng/L	Quarterly	Grab	See s. 6.2.7

6.2.3 Total Maximum Daily Load (TMDL) for Outfalls 001 and 007

6.2.3.1 Total Maximum Daily Load (TMDL) Limitations

Approved TMDL: The Milwaukee River Basin TMDL Waste Load Allocation (WLA) for Total Phosphorus and Total Suspended Solids was approved by the U.S. Environmental Protection Agency on March 9, 2018. The approved TMDL WLA limit for Total Phosphorus for Outfall 007 is: 730.21 lbs/year (1.0 mg/L). The approved TMDL WLA limit for Total Suspended Solids for Outfall 007 is: 63,441 lbs/year. The approved TMDL WLA limit for Total Phosphorus for Outfall 001 is: 28.35 lbs/year (1.0 mg/L). The approved TMDL WLA limit for Total Suspended Solids for Outfall 001 is: 2814.54 lbs/year. More information on how these allocations were derived can be found in the TMDL document. The annual loading at each outfall shall be reported in the End of Season Annual Summary and determined as the sum of the modeled loading with storm water controls implemented and the calculated load from monitoring during months of deicing activity under subsection 6.2.1. Modeled loading only needs to be demonstrated once during the permit term unless amendments to the SWPPP

are reasonably expected to significantly affect model results. Refer to the compliance schedule for compliance dates.

The General Mitchell Airport shall take the necessary steps to implement the Milwaukee River Basin TMDL (total daily maximum load) by amending the SWPPP to address the airport's contribution of total suspended solids (TSS) and phosphorus (TP) in accordance with the date provided in s. 7. In the SWPPP amendment, the permittee shall identify BMPs, and propose a schedule for BMP installation. The permittee shall also report on TMDL progress within the End of Season Annual Summary. The schedule for BMP installation to achieve compliance with the TMDL WLA limit for Total Phosphorus shall not exceed the final limit effective date of May 1, 2029.

6.2.3.2 Narrative Phosphorus and TSS Interim Limits

The permitted facility shall be operated and managed so that the amount of phosphorus and TSS being discharged on an annual basis does not increase over the permit term, and that instead phosphorus and TSS reductions will occur over time through implementation of best management practices.

6.2.4 Sampling Point (Outfall) 003 - Mitchell Airport Oak Creek Tributary

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	See Permit Note	Estimated	See ss. 6.2.5.1 and 6.2.5.2
COD		mg/L	See Permit Note	Composite	
BOD_5, Total		mg/L	See Permit Note	Calculated	See ss. 6.2.5.1 and 6.2.5.2
Suspended Solids, Total		mg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
pH Field	Daily Max	9.0 su	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2
pH Field	Daily Min	6.0 su	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2
Dissolved Oxygen		mg/L	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2
Phosphorus, Total	Monthly Avg	1.0 mg/L	See Permit Note	Composite	Interim Limit. Effective immediately and applies year-round. See ss. 6.2.4.1, 6.2.5.1, and 6.2.5.2
Propylene glycol		mg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Chlorine, Total Residual		µg/L	See Permit Note	Grab	See ss. 6.2.5.1 and 6.2.5.2
Chloride		mg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Hardness, Total as $CaCO_3$		mg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Copper, Total Recoverable		µg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Zinc, Total Recoverable		µg/L	See Permit Note	Composite	See ss. 6.2.5.1 and 6.2.5.2
Acute WET		TU_a	See Permit Note	Grab	See s. 6.2.5.4
Chronic WET		TUc	See Permit Note	Grab	See s. 6.2.5.4
PFAS		ng/L	Quarterly	Grab	See s. 6.2.7

6.2.4.1 Phosphorus Water Quality Based Effluent Limitation(s)

The final water quality based effluent limit for phosphorus for Outfall 003 is 0.075 mg/L as a six-month average and 0.225 mg/L as a monthly average and will take effect per the Compliance Schedule unless:

(A) As part of the application for the next reissuance, or prior to filing the application, the permittee submits either: 1.) a watershed adaptive management plan and a completed Watershed Adaptive Management Request Form 3200-139; or 2.) an application for water quality trading; or 3.) an application for a variance; or 4.) new information or additional data that supports a recalculation of the numeric limitation; and

(B) The Department modifies, revokes and reissues, or reissues the permit to incorporate a revised limitation before the expiration of the compliance schedule*.

Note: The permittee may also submit an application for a variance within 60 days of this permit reissuance, as noted in the permit cover letter, in accordance with s. 283.15, Stats.

If Adaptive Management or Water Quality Trading is approved as part of the permit application for the next reissuance or as part of an application for a modification or revocation and reissuance, the plan and specifications submittal, construction, and final effective dates for compliance with the total phosphorus WQBEL may change in the reissued or modified permit. In addition, the numeric value of the water quality based effluent limit may change based on new information (e.g. a TMDL) or additional data. If a variance is approved for the next reissuance, interim limits and conditions will be imposed in the reissued permit in accordance with s. 283.15, Stats., and applicable regulations. A permittee may apply for a variance to the phosphorus WQBEL at the next reissuance even if the permittee did not apply for a phosphorus variance as part of this permit reissuance.

Additional Requirements: If a water quality based effluent limit has taken effect in a permit, any increase in the limit is subject to s. NR 102.05(1) and ch. NR 207, Wis. Adm. Code. When a six-month average effluent limit is specified for Total Phosphorus the applicable averaging periods are May through October and November through April.

*Note: The Department will prioritize reissuances and revocations, modifications, and reissuances of permits to allow permittees the opportunity to implement adaptive management or nutrient trading in a timely and effective manner.

6.2.5 Monitoring Special Conditions

6.2.5.1 Visual Inspections

Visually inspect the outfalls listed in section 6.1 at the time of sampling to characterize the quality of storm water discharged during the "first flush" of storm water runoff from representative storms or snow melts. Within the first 30 minutes of when runoff first appears at the monitoring location, or as soon thereafter as practicable,

observations of the discharge shall be made. Characterization of runoff quality shall include observations for color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. Documentation shall include the inspection date, inspector, summary of observations, and probable sources of observed storm water pollution.

6.2.5.2 Sampling Procedure and Monitoring Frequency

The following requirements apply to collecting samples when sampling is conducted:

(i) Samples shall be collected that are representative of the winter deicing runoff events.

(j) Monitoring locations shall be sampled during the same 4-day snow removal period. Sampling Point 701 and Outfall 007 samples shall be collected on the same day.

(k) For the parameters identified in this section, the permittee shall submit one sampling result for every 4 days of active snow removal, up to 10 samples in a given deicing season.

a. Flow Rate
b. COD
c. BOD5, Total
d. Suspended Solids, Total
e. pH Field
f. Dissolved Oxygen
g. Phosphorus, Total
h. Propylene glycol

(l) For the parameters identified in this section, the permittee shall submit one sampling result for every 4 days of active snow removal, up to 6 samples in a given deicing season.

a. Chlorine, Total Residual
b. Chloride
c. Hardness, Total as CaCO3
d. Copper, Total Recoverable
e. Zinc, Total Recoverable

(m) Samples shall be representative of the deicer runoff. A sample shall be collected during a 30-minute period. A minimum of 3 sample portions, evenly spaced throughout the 30-minute sampling period, shall be collected for a composite sample. As an alternative, a “flow weighted composite” sample for the entire storm water event may be collected. In addition, a grab sample shall be collected within the first 30 minutes of the runoff for those parameters being analyzed that require a grab sample.

(n) A narrative description shall be provided of each storm event which is sampled, including the date and duration of the storm, precipitation amount (if snowfall include inches of snow and rainfall equivalent), and an estimate of the total volume of storm water discharged. These narrative descriptions shall be retained and included in the End of Season Annual Summary (see section 3.5).

(o) Approved analytical methods shall be used in accordance with ch. NR 219, Wis. Adm. Code "Analytical Test Methods and Procedures", or guidance on storm water sampling procedures developed by the department. When no analytical method is approved, a suitable method may be used provided a description of the method is submitted to the department for concurrence prior to sampling.

(p) Additional samples may be collected as necessary for data collection at the permittee’s discretion. This additional data shall be reported to the department via the End of Season Annual Summary.

6.2.5.3 Pollutant Loading

The permittee shall estimate the annual pollutant loading from spent deicing and anti-icing chemicals discharged from the permitted area into the storm sewer system. Data shall be maintained on the following and reported in the End of Season Annual Summary:

(f) The amount and type of deicer or anti-icer used each deicing season reporting period (100% product).

(g) The estimated amount of glycol captured by glycol management practices and deicing pads (100% product).

(h) The estimated amount of glycol discharged in runoff to the separate storm sewer system, with a brief description on the how the estimate was calculated (100% product). The estimated volume of storm water discharged from Outfalls 001, 003, and 007, with a brief description on how the estimate was calculated.

(i) The weather conditions that required deicing or anti-icing, to determine the correlation between the weather and amount of deicer and anti-icer used.

(j) The air traffic, to determine the correlation between air traffic and amount of deicer and anti-icer used. The permittee may determine what the relevant air traffic data is.

6.2.5.4 Whole Effluent Toxicity (WET) Testing

A compliance schedule of one year is included in order to give the permittee time to develop a proper WET testing sampling procedure.

Primary Control Water: Wilson Park Creek (Outfall 001 and Outfall 007) and Unnamed Tributary to Oak Creek (Outfall 003)

Instream Waste Concentration (IWC): 100%

Dilution series: At least five effluent concentrations and dual controls must be included in each test.

- Acute: 100, 50, 25, 12.5, 6.25% and any additional selected by the permittee.
- Chronic: 100, 75, 50, 25, 12.5% and any additional selected by the permittee.

WET Testing Frequency:

Acute tests shall be conducted three times each deicing season, beginning in the fall of 2023, in order to collect data on the different types of weather events that may occur (freezing rain, falling snow, and melting snow). Tests shall be conducted for all 3 outfalls (001, 003, 007).

Chronic tests shall be conducted once in the spring of 2024 and once in the spring of 2026, and shall capture spring melting events for runoff which occurs through outfalls 007 and 003. If the permittee is unable to sample in a given year due to factors outside of their control, then the sampling must be done the following year.

Reporting: The permittee shall report test results on the Discharge Monitoring Report form, and also complete the "Whole Effluent Toxicity Test Report Form" (Section 6, "State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2nd Edition"), for each test. The original, complete, signed version of the Whole Effluent Toxicity Test Report Form shall be sent to the Biomonitoring Coordinator, Bureau of Water Quality, 101 S. Webster St., P.O. Box 7921, Madison, WI 53707-7921, within 45 days of test completion. The Discharge Monitoring Report (DMR) form shall be submitted electronically by the required deadline.

Determination of Positive Results: An acute toxicity test shall be considered positive if the Toxic Unit - Acute (TU_a) is greater than 1.0 for either species. The TU_a shall be calculated as follows: $TU_a = 100 \div LC_{50}$. A chronic toxicity test shall be considered positive if the Toxic Unit - Chronic (TU_c) is greater than 1.0 for either species. The TU_c shall be calculated as follows: $TU_c = 100 \div IC_{25}$.

6.2.5.5 Alternative Approaches to Phosphorus WQBEL Compliance

Rather than upgrading the airport to comply with WQBELs for total phosphorus, the permittee may use Water Quality Trading or the Watershed Adaptive Management Option, to achieve compliance under ch. NR 217, Wis. Adm. Code, provided that the permit is modified, revoked and reissued, or reissued to incorporate any such alternative approach. The permittee may also implement an upgrade to the airport in combination with Water Quality Trading or the Watershed Adaptive Management Option to achieve compliance, provided that the permit is modified, revoked and reissued, or reissued to incorporate any such alternative approach. If the Final Compliance Alternatives Plan concludes that a variance will be pursued, the Plan shall provide information regarding the basis for the variance.

6.2.5.6 Submittal of Permit Application for Next Reissuance and Adaptive Management or Pollutant Trading Plan or Variance Application

The permittee shall submit the permit application for the next reissuance at least 6 months prior to expiration of this permit. If the permittee intends to pursue adaptive management to achieve compliance with the phosphorus water quality based effluent limitation, the permittee shall submit with the application for the next reissuance: a completed Watershed Adaptive Management Request Form 3200-139, the completed Adaptive Management Plan and final plans for any system upgrades necessary to meet interim limits pursuant to s. NR 217.18, Wis. Adm. Code. If the permittee intends to pursue pollutant trading to achieve compliance, the permittee shall submit an application for water quality trading with the application for the next reissuance. If system upgrades will be used in combination with pollutant trading to achieve compliance with the final water quality-based limit, the reissued permit will specify a schedule for the necessary upgrades. If the permittee intends to seek a variance, the permittee shall submit an application for a variance with the application for the next reissuance.

6.2.6 Discharge Requirements

6.2.6.1 General Discharge Restrictions

The permittee may not discharge from the separate storm sewer system the following substances in amounts that cause exceedances of the standards and requirements in s. 8.3.4 and 8.3.5:

(a) Deicing and anti-icing chemicals, including ethylene glycol, propylene glycol, urea, potassium acetate, sodium acetate, and any substitute chemicals.

(b) Solids and sand that may settle to form putrescent or otherwise objectionable sludge or sediment deposits.

(c) Oil, grease, fuel and other floating material that form noticeable accumulations of debris, scum, foam, or sheen.

(d) Color or odor that is unnatural and to such a degree as to create a nuisance.

(e) Toxic substances in toxic amounts to aquatic life, wildlife, or humans.

(f) Nutrients conductive to the excessive growth of aquatic plants and algae to the extent that such growths are detrimental to desirable forms of aquatic life, create conditions that are unsightly, or are a nuisance.

(g) Any other substances that may impair beneficial uses of the receiving water.

6.2.6.2 Fugitive Glycol

The percent of glycol captured and percent discharged shall only apply to the glycol draining onto the glycol management area and potentially available for capture. The assumptions for fugitive glycol shall be 40% of the total glycol in Type I aircraft deicing fluids (ADFs) and 15% of the glycol in Type IV aircraft anti-icing fluids (AAFs) used on ramps and applied to aircraft is available for capture. The other 60% of the glycol in Type I ADF and 85% of glycol in AAF shall be considered fugitive and cannot be cost effectively captured. Fugitive

glycol shall include glycol that shears off aircraft upon take-off, glycol that dissipates as vapor into the atmosphere, and glycol used in restricted areas. Any reduction in the amount glycol discharged represents the reduction that may result from a maximum of 40% of the total amount of glycol in Type I ADF and 15% of the glycol in Type IV AAF used.

6.2.6.3 Conservation Efforts

The effects of any conservation efforts and new technologies by tenants shall be referenced to a baseline of historical glycol usage rates. The benefit of any individual technology and/or conservation effort shall be described as shown in equations (1) and (2) below:

Equation (1): $C_i = ADF_{Ai} \div ADF_{Bi}$

C_i = Fraction of baseline used by tenant "i" with new technologies and conservation practices in place.
ADF_{Ai} = Type I aircraft deicing fluid "*A*ctually" used by tenant "i".
ADF_{Bi} = Type I aircraft deicing fluid used under "*B*aseline" conditions by tenant "i".

The amount of glycol used shall be expressed in gallons of 100% product undiluted during a deicing season (usually October through April).

Equation (2): $C = \sum C_i X_i$

C = Composite fraction applicable to airport representing all the tenants.
X_i = Proportion of all Type I ADF used by tenant "i".

Documented performance data shall be provided on the new technologies and conservation practices to serve as the basis for agreed upon values of "C_i", along with an accurate characterization of relative total Type I ADF usage by the tenant under baseline conditions, to serve as the basis for "X_i".

6.2.6.4 Collectable Type I Aircraft Deicing Fluids

Based on data for Type I usage, the amount of collectable Type I fluid assumes 20% "*A*" remains on the aircraft, 40% "*L*" is lost as not collectable, for a total loss of 60% fugitive. The original total amount of glycol used "*T*" shall be reduced by a fraction "*C*" when conservation efforts are implemented. The collectable runoff "*R*" shall equal 40% before conservation efforts, but with conservation efforts "R_C" will equal less than 40%.

ADF Glycol Usage = $TC = AT + LTC + R_CT$
$R_C = (1 - A/C - \mathrm{L}) = 0.6 - (0.2 \div C)$ = Fraction of total ADF as collectable runoff with conservation efforts.
$\sum Type\ I$ = Sum of all the Type I glycol used by the tenants during a deicing season.

Collectable $Type\ I = \mathrm{R_C} \times \sum Type\ I = (1 - A/C - \mathrm{L}) \times \sum Type\ I$

6.2.6.5 Collectable Type IV Aircraft Anti-icing Fluids

Based on data for Type IV usage, approximately 85% of the applied Type IV AAF remains on the aircraft. The remaining 15% shall be considered collectable runoff.

$\sum Type\ IV$ = Sum of all the Type IV glycol used by the tenants during a deicing season.

Collectable $Type\ IV = 0.15 \times \sum Type\ IV$

6.2.6.6 Annual Glycol Capture Goal

Glycol reduction shall be in accordance with the deicing and anti-icing management controls in the approved Storm Water Pollution Prevention Plan. As a measurement of performance, a glycol capture goal shall be determined based on capturing 85% of the collectable glycol runoff. The permittee shall compare the amount of glycol applied for deicing and anti-icing with the estimated amount of glycol captured. This comparison provides a measurement of the effectiveness on the glycol management controls to prevent discharges of glycol

contaminated runoff into the separate storm sewer system. If the percent captured for disposal or recycling meets or exceeds the annual glycol capture goal percentage, the airport shall be considered in compliance.

A glycol capture goal shall be recalculated in each annual report according to equations (3) and (4) below, using the data from the current deicing season for *C, ∑Type I, and ∑Type IV:*

Equation (3): 85% Collectable Glycol = $0.85[(0.6 – (0.2 \div C)] \times \sum Type\ I + 0.85 \times (0.15 \times \sum Type\ IV)$

$C = \sum C_i X_i$ = Composite fraction applicable airport wide.

Equation (4): Goal = $[[0.51 – (0.17 \div C)] \times \sum Type\ I + 0.1275 \times \sum Type\ IV] \div (\sum Type\ I + \sum Type\ IV) \times 100$.

6.2.6.7 BOD5

In calculating the 5-day biochemical oxygen demand concentration, the permittee shall use an established COD-BOD relationship approved by the department. The permittee may choose to further establish this relationship with additional BOD5 samples.

6.2.6.8 Grab Sampling

For any instance in which a composite sample is unable to be collected, the permittee may utilize a grab sample in accordance with the monitoring requirements identified above. The permittee shall indicate on the eDMRs whether any samples which are designated as "Composite" in this WPDES permit were collected as a Grab.

6.2.7 Per-and polyfluoroalkyl Substances (PFAS)

6.2.7.1 PFAS Monitoring

The permittee shall sample outfalls 003 and 007 for the PFAS identified in the department's PFAS Update-Default Reporting List for Sampling and Analysis Requirements and Expectations (current version at the time of permit reissuance dated March 1, 2021) to verify reductions in the concentrations of the effluent that is leaving the airport.

6.2.7.2 PFAS Source Reduction Measures

The permittee shall modify the Storm Water Pollution Prevention Plan (SWPPP) to include best management practices (BMPs) which are designed to reduce PFAS discharges from the airport. These BMPs shall include, but not be limited to:

(a) Continue source investigation efforts by sampling various locations beyond those explicitly required by this WPDES permit. Any additional PFAS data collected shall be reported to the department in the PFAS BMP Annual Status Update.

(b) Mitigate the discharge of PFAS by performing routine inspections of all storm sewers that receive airport runoff, and performing maintenance as necessary. Repair/reline/seal fractures in storm sewer pipes and/or contaminated paved areas.

(c) Have controls in place which prevent PFAS-containing AFFF from being released into the environment when its use is deemed necessary and identify how that spent foam is ultimately disposed of.

(d) Have a spill response procedure in place.

(e) Document the decision-making process when choosing a particular AFFF. This process shall include reviewing environmental data provided by the manufacturer, if available.

(f) Document how AFFF is stored, handled, and disposed of onsite, in addition to how testing/training exercises are conducted and how environmental contamination is minimized in these instances.

(g) Consider switching firefighting foams used onsite when a fluorine-free alternative that meets the required FAA specifications is available, and avoid purchasing PFOS-based or ≥C8 fluorotelomer-based AFFF.

NOTE: The permittee is required to comply with s. 299.48, Wis. Stats., and ch. NR 159 Emergency Rule for containment and disposal of Class B firefighting foam.

7 Schedules

7.1 SWPPP

Required Action	Due Date
Update SWPPP: The permittee shall update the Storm Water Pollution Prevention Plan to include updated requirements of this WPDES permit and submit to the department for review.	09/30/2023

7.2 WET Testing Protocol Determination

Required Action	Due Date
Submit WET Testing Plan: The permittee shall develop and submit to the department for approval a WET testing protocol for both acute and chronic WET tests.	04/30/2023
Update WET Testing Protocol: If the department determines that the WET testing protocol is insufficient in capturing the toxicity of the effluent, the permittee shall update the protocol and submit to the department for approval.	09/30/2023

7.3 End of Season Annual Summary

Required Action	Due Date
End of Season Annual Summary: The permittee shall submit for department review the End of Season Annual Summary in accordance with the WPDES permit which was effective during the 2021-2022 deicing season.	09/30/2022
End of Season Annual Summary #2: The permittee shall submit for department review the End of Season Annual Summary, which must contain at least all of the required information in sections 2.3, 3.1, 3.3, 3.5 and subsections 5.2.4.10, and 6.2.3.2.	09/30/2023
End of Season Annual Summary #3: The permittee shall submit for department review the End of Season Annual Summary, which must contain at least all of the required information in sections 2.3, 3.1, 3.3, 3.5 and subsections 5.2.4.10, and 6.2.3.2.	09/30/2024
End of Season Annual Summary #4: The permittee shall submit for department review the End of Season Annual Summary, which must contain at least all of the required information in sections 2.3, 3.1, 3.3, 3.5 and subsections 5.2.4.10, and 6.2.3.2.	09/30/2025
End of Season Annual Summary #5: The permittee shall submit for department review the End of Season Annual Summary, which must contain at least all of the required information in sections 2.3, 3.1, 3.3, 3.5 and subsections 5.2.4.10, and 6.2.3.2.	09/30/2026
Ongoing End of Season Annual Summaries: in the event this WPDES permit is not reissued by the expiration date, the permittee shall continue to submit End of Season Annual Summaries in accordance with section 3.5.	

7.4 PFAS BMP Plan

The permittee is required to develop and implement a Best Management Practices (BMP) plan to address the loadings of PFAS in the discharge.

Required Action	Due Date
Develop BMP Plan: The permittee is required to develop and implement a PFAS BMP plan to identify the sources of PFAS in the discharge and report findings to the WDNR.	12/31/2022
BMP Plan Implementation Status Report: The permittee shall submit a status report on the implementation of the PFAS BMP plan.	09/30/2023
BMP Plan Implementation Status Report #2: The permittee shall submit a status report on the implementation of the PFAS BMP plan.	09/30/2024
BMP Plan Implementation Status Report #3: The permittee shall submit a status report on the implementation of the PFAS BMP plan.	09/30/2025
BMP Plan Implementation Status Report #4: The permittee shall submit a status report on the implementation of the PFAS BMP plan.	09/30/2026
Ongoing BMP Status Reports: In the event that this permit is not reissued by the permit expiration date, the permittee shall continue to submit ongoing BMP status reports by September 30th each year.	

7.5 Prohibited Discharge Inspections

Required Action	Due Date
Preliminary Prohibited Discharge Inspection Report: The methods for determining onsite prohibited discharges shall be identified in preliminary report explaining how the evaluation will be completed, the equipment used for investigation and the rationale for investigatory methods.	09/30/2022
Prohibited Discharge Inspection Report: The permittee shall evaluate all storm water outfalls for prohibited contributions and illicit connections. Methods may include a review of as-built schematics or drainage plans of the storm water collection system, end of pipe screening during dry weather, dye testing, physical inspection of the storm water collection system, or other appropriate monitoring. The results of this inspection shall be summarized and submitted to the department.	09/30/2023
Prohibited Discharge Inspection Report #2: The permittee shall evaluate all storm water outfalls for prohibited contributions and illicit connections. Methods may include a review of as-built schematics or drainage plans of the storm water collection system, end of pipe screening during dry weather, dye testing, physical inspection of the storm water collection system, or other appropriate monitoring. The results of this inspection shall be summarized and submitted to the department.	09/30/2024
Prohibited Discharge Inspection Report #3: The permittee shall evaluate all storm water outfalls for prohibited contributions and illicit connections. Methods may include a review of as-built schematics or drainage plans of the storm water collection system, end of pipe screening during dry weather, dye testing, physical inspection of the storm water collection system, or other appropriate monitoring. The results of this inspection shall be summarized and submitted to the department.	09/30/2025
Prohibited Discharge Inspection Report #4: The permittee shall evaluate all storm water outfalls for prohibited contributions and illicit connections. Methods may include a review of as-built schematics or drainage plans of the storm water collection system, end of pipe screening during dry weather, dye testing, physical inspection of the storm water collection system, or other appropriate monitoring. The results of this inspection shall be summarized and submitted to the department.	09/30/2026

Ongoing Prohibited Discharge Inspections: In the event this WPDES permit is not reissued by the expiration date, the permittee shall continue to submit Prohibited Water Discharge Inspection Reports by September 30th annually.	

7.6 Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003, and 007)

The permittee shall comply with the WQBELs for Outfall 003 and the WLAs for Outfalls 001 and 007. No later than 14 days following each compliance date, the permittee shall notify the Department in writing of its compliance or noncompliance.

Required Action	Due Date
Operational Evaluation Report: The permittee shall prepare and submit to the Department for approval an operational evaluation report. The report shall include an evaluation of collected effluent data, possible source reduction measures, operational improvements or other minor facility modifications that will optimize reductions in phosphorus discharges during the period prior to complying with final phosphorus WQBELs/WLAs and, where possible, enable compliance with final phosphorus WQBELs/WLAs by 05/01/2025. The report shall provide a plan and schedule for implementation of the measures, improvements, and modifications as soon as possible, but not later than 05/01/2025 and state whether the measures, improvements, and modifications will enable compliance with final phosphorus WQBELs/WLAs. Regardless of whether they are expected to result in compliance, the permittee shall implement the measures, improvements, and modifications in accordance with the plan and schedule specified in the operational evaluation report. If the operational evaluation report concludes that the facility can achieve final phosphorus WQBELs using the existing treatment system with only source reduction measures, operational improvements, and minor facility modifications, the permittee shall comply with the final phosphorus WQBELs/WLAs by 05/01/2025 and is not required to comply with the milestones identified below for years 3 through 7 of this compliance schedule ('Preliminary Compliance Alternatives Plan', 'Final Compliance Alternatives Plan', 'Final Plans and Specifications', 'Treatment System Upgrade to Meet WQBELs/WLAs', 'Complete Construction', 'Achieve Compliance'). STUDY OF FEASIBLE ALTERNATIVES - If the Operational Evaluation Report concludes that the permittee cannot achieve final phosphorus WQBELs/WLAs with source reduction measures, operational improvements and other minor facility modifications, the permittee shall initiate a study of feasible alternatives for meeting final phosphorus WQBELs/WLAs and comply with the remaining required actions of this schedule of compliance. If the Department disagrees with the conclusion of the report, and determines that the permittee can achieve final phosphorus WQBELs/WLAs using only source reduction measures, operational improvements, and minor facility modifications, the Department may reopen and modify the permit to include an implementation schedule for achieving the final phosphorus WQBELs/WLAs sooner than 05/01/2029.	09/30/2023
Compliance Alternatives, Source Reduction, Improvements and Modifications Status: The permittee shall submit a 'Compliance Alternatives, Source Reduction, Operational Improvements and Minor Facility Modification' status report to the Department. The report shall provide an update on the permittee's: (1) progress implementing source reduction measures, operational improvements, and minor facility modifications to optimize reductions in phosphorus discharges and, to the extent that such measures, improvements, and modifications will not enable compliance with the WQBELs, (2) status evaluating feasible alternatives for meeting phosphorus WQBELs/WLAs.	09/30/2024
Preliminary Compliance Alternatives Plan: The permittee shall submit a preliminary compliance alternatives plan to the Department.	03/31/2025

If the plan concludes upgrading of the permittee's facility is necessary to achieve final phosphorus WQBELs/WLAs, the submittal shall include a preliminary engineering design report. If the plan concludes Adaptive Management will be used, the submittal shall include a completed Watershed Adaptive Management Request Form 3200-139 without the Adaptive Management Plan. If water quality trading will be undertaken, the plan must state that trading will be pursued.	
Final Compliance Alternatives Plan: The permittee shall submit a final compliance alternatives plan to the Department. If the plan concludes upgrading of the permittee's facility is necessary to meet final phosphorus WQBELs/WLAs, the submittal shall include a final engineering design report addressing the treatment upgrades. If the plan concludes Adaptive Management will be implemented, the submittal shall include a completed Watershed Adaptive Management Request Form 3200-139 and an engineering report addressing any treatment system upgrades necessary to meet interim limits pursuant to s. NR 217.18, Wis. Adm. Code. If the plan concludes water quality trading will be used, the submittal shall identify potential trading partners. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.	09/30/2025
Progress Report on Plans & Specifications: Submit progress report regarding the progress of preparing final plans and specifications. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.	03/31/2026
Final Plans and Specifications: Unless the permit has been modified, revoked and reissued, or reissued to include Adaptive Management or Water Quality Trading measures or to include a revised schedule based on factors in s. NR 217.17, Wis. Adm. Code, the permittee shall submit final construction plans to the Department for approval pursuant to s. 281.41, Stats., specifying treatment upgrades that must be constructed to achieve compliance with final phosphorus WQBELs/WLAs, and a schedule for completing construction of the upgrades by the complete construction date specified below. (Note: Permit modification, revocation and reissuance, and reissuance are subject to s. 283.53(2), Stats.) Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.	09/30/2026
Upgrades to Meet WQBELs/WLAs: The permittee shall initiate construction of the upgrades. The permittee shall obtain approval of the final construction plans and schedule from the Department pursuant to s. 281.41. Stats. Upon approval of the final construction plans and schedule by the Department pursuant to s. 281.41, Stats., the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.	09/30/2027
Construction Upgrade Progress Report #1: The permittee shall submit a progress report on construction upgrades. Note: See 'Alternative Approaches to Phosphorus WQBEL/WLA Compliance' in the Surface Water section of this permit.	03/31/2028
Construction Upgrade Progress Report #2: The permittee shall submit a progress report on construction upgrades. Note: See 'Alternative Approaches to Phosphorus WQBEL/WLA Compliance' in the Surface Water section of this permit.	09/30/2028

Complete Construction: The permittee shall complete construction of wastewater treatment system upgrades. Note: See 'Alternative Approaches to Phosphorus WQBEL/WLA Compliance' in the Surface Water section of this permit.	04/30/2029
Achieve Compliance: The permittee shall achieve compliance with final phosphorus WQBELs. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.	05/01/2029

7.7 Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007)

The permittee shall comply with the TMDL (Total Maximum Daily Load) derived WQBELs (Water Quality Based Effluent Limits) for TSS as specified.

Required Action	Due Date
Operational Evaluation Report: The permittee shall prepare and submit to the Department for approval an operational evaluation report. The report shall include an evaluation of collected effluent data, possible source reduction measures, operational improvements or other minor facility modifications that will optimize reductions in TSS discharges during the period prior to complying with final TSS WQBELs and, where possible, enable compliance with final TSS WQBELs by 05/01/2025. The report shall provide a plan and schedule for implementation of the measures, improvements, and modifications as soon as possible, but not later than 05/01/2025 and state whether the measures, improvements, and modifications will enable compliance with final TSS WQBELs. Regardless of whether they are expected to result in compliance, the permittee shall implement the measures, improvements, and modifications in accordance with the plan and schedule specified in the operational evaluation report. If the operational evaluation report concludes that the facility can achieve final TSS WQBELs using the existing system with only source reduction measures, operational improvements, and minor facility modifications, the permittee shall comply with the final TSS WQBEL by 05/01/2025 and is not required to comply with the milestones identified below for years 3 through 7 of this compliance schedule ("Preliminary Compliance Alternatives Plan", "Final Compliance Alternatives Plan", "Final Plans and Specifications", "Treatment Upgrades to Meet WQBELs", "Complete Construction", "Achieve Compliance"). STUDY OF FEASIBLE ALTERNATIVES - If the Operational Evaluation Report concludes that the permittee cannot achieve final TSS WQBELs with source reduction measures, operational improvements and other minor facility modifications, the permittee shall initiate a study of feasible alternatives for meeting final TSS WQBELs and comply with the remaining required actions of this schedule of compliance. If the Department disagrees with the conclusion of the report, and determines that the permittee can achieve final TSS WQBELs with only source reduction measures, operational improvements, and minor facility modifications, the Department may reopen and modify the permit to include an implementation schedule for achieving the final TSS WQBELs sooner than 05/01/2029.	09/30/2023
Compliance Alternatives, Source Reduction, Improvements and Modifications Status: The permittee shall submit a 'Compliance Alternatives, Source Reduction, Operational Improvements and Minor Facility Modification' status report to the Department. The report shall provide an update on the permittee's: (1) progress implementing source reduction measures, operational improvements, and minor facility modifications to optimize reductions in TSS discharges and, to the extent that such measures, improvements, and modifications will not enable compliance with the WQBELs, (2) status evaluating feasible alternatives for meeting TSS WQBELs.	09/30/2024
Preliminary Compliance Alternatives Plan: The permittee shall submit a preliminary compliance	03/31/2025

alternatives plan to the Department. If the plan concludes upgrading of the permittee's facility is necessary to achieve final TSS WQBELs, the submittal shall include a preliminary engineering design report. If the plan concludes Adaptive Management will be used, the submittal shall include a completed Watershed Adaptive Management Request Form 3200-139 without the Adaptive Management Plan. If water quality trading will be undertaken, the plan must state that trading will be pursued.	
Final Compliance Alternatives Plan: The permittee shall submit a final compliance alternatives plan to the Department. If the plan concludes upgrading of the permittee's system is necessary to meet final TSS WQBELs, the submittal shall include a final engineering design report addressing the treatment plant upgrades, and a facility plan if required pursuant to ch. NR 110. If the plan concludes Adaptive Management will be implemented, the submittal shall include a completed Watershed Adaptive Management Request Form 3200-139 and an engineering report addressing any treatment system upgrades necessary to meet interim limits. If the plan concludes water quality trading will be used, the submittal shall identify potential trading partners. Alternative Approaches: Rather than upgrading the wastewater treatment facility to comply with WQBELs for TSS, the permittee may use Water Quality Trading or the Adaptive Management Option to achieve compliance, provided that the permit is modified, revoked and reissued, or reissued to incorporate any such alternative approach. If the Final Compliance Alternatives Plan concludes that a variance will be pursued, the Plan shall provide information regarding the basis for the variance.	09/30/2025
Progress Report on Plans & Specifications: Submit progress report regarding the progress of preparing final plans and specifications. Note: See 'Alternative Approaches' above.	03/31/2026
Final Plans and Specifications: Unless the permit has been modified, revoked and reissued, or reissued to include Water Quality Trading measures the permittee shall submit final construction plans to the Department for approval pursuant to s. 281.41, Stats., specifying system upgrades that must be constructed to achieve compliance with final TSS WQBELs, and a schedule for completing construction of the upgrades by the complete construction date specified below. (Note: Permit modification, revocation and reissuance, and reissuance is subject to s. 283.53(2) Stats.) Note: See 'Alternative Approaches' above.	09/30/2026
Upgrades to Meet WQBELs: The permittee shall initiate construction of the upgrades. The permittee shall obtain approval of the final construction plans and schedule from the Department pursuant to s. 281.41. Stats. Upon approval of the final construction plans and schedule by the Department pursuant to s. 281.41, Stats., the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications. Note: See 'Alternative Approaches' above.	09/30/2027
Construction Upgrade Progress Report #1: The permittee shall submit a progress report on construction upgrades. Note: See 'Alternative Approaches' above.	03/31/2028
Construction Upgrade Progress Report #2: The permittee shall submit a progress report on	09/30/2028

construction upgrades. Note: See 'Alternative Approaches' above.	
Complete Construction: The permittee shall complete construction of wastewater treatment system upgrades. Note: See 'Alternative Approaches' above.	04/30/2029
Achieve Compliance: The permittee shall achieve compliance with final TSS WQBELs. Note: See 'Alternative Approaches' above.	05/01/2029

8 Standard Requirements

NR 205, Wisconsin Administrative Code (Conditions for Industrial Dischargers): The conditions in ss. NR 205.07(1) and NR 205.07(3), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in ss. NR 205.07(1) and NR 205.07(3).

8.1 Reporting and Monitoring Requirements

8.1.1 Monitoring Results

Monitoring results obtained during the previous month shall be summarized and reported on a Department Wastewater Discharge Monitoring Report. The report may require reporting of any or all of the information specified below under 'Recording of Results'. This report is to be returned to the Department no later than the date indicated on the form. A copy of the Wastewater Discharge Monitoring Report Form or an electronic file of the report shall be retained by the permittee.

Monitoring results shall be reported on an electronic discharge monitoring report (eDMR). The eDMR shall be certified electronically by a responsible executive or officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

If the permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included on the Wastewater Discharge Monitoring Report.

The permittee shall comply with all limits for each parameter regardless of monitoring frequency. For example, monthly, weekly, and/or daily limits shall be met even with monthly monitoring. The permittee may monitor more frequently than required for any parameter.

8.1.2 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with Chapters NR 218 and NR 219, Wis. Adm. Code and shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sample collection and analysis shall be performed in accordance with ch. NR 140, Wis. Adm. Code. The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation. If the required level cannot be met by any of the methods available in NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected. Additional test procedures may be specified in this permit.

8.1.3 Recording of Results

The permittee shall maintain records which provide the following information for each effluent measurement or sample taken:

- the date, exact place, method and time of sampling or measurements;
- the individual who performed the sampling or measurements;
- the date the analysis was performed;
- the individual who performed the analysis;
- the analytical techniques or methods used; and
- the results of the analysis.

8.1.4 Reporting of Monitoring Results

The permittee shall use the following conventions when reporting effluent monitoring results:

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.

- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.

- For purposes of calculating NR 101 fees, the 2 mg/l lower reporting limits for BOD_5 and Total Suspended Solids shall be considered to be limits of quantitation

- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a 0 (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.

8.1.5 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings or electronic data records for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 3 years from the date of the sample, measurement, report or application, except for sludge management forms and records, which shall be kept for a period of at least 5 years.

8.1.6 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or correct information to the Department.

8.1.7 Reporting Requirements – Alterations or Additions

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required when:

- The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source.
- The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification requirement applies to pollutants which are not subject to effluent limitations in the existing permit.
- The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use of disposal sites not reported during the permit application process nor reported pursuant to an approved land application plan. Additional sites may not be used for the land application of sludge until department approval is received.

8.2 System Operating Requirements

8.2.1 Noncompliance Reporting

The permittee shall report the following types of noncompliance by a telephone call to the Department's regional office within 24 hours after becoming aware of the noncompliance:

- any noncompliance which may endanger health or the environment;
- any violation of an effluent limitation resulting from a bypass;
- any violation of an effluent limitation resulting from an upset; and
- any violation of a maximum discharge limitation for any of the pollutants listed by the Department in the permit, either for effluent or sludge.

A written report describing the noncompliance shall also be submitted to the Department as directed at the end of this permit within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the Department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.

A scheduled bypass approved by the Department under the 'Scheduled Bypass' section of this permit shall not be subject to the reporting required under this section.

NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources **immediately** of any discharge not authorized by the permit. **The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003**.

8.2.2 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training as required in ch. NR 114, Wis. Adm. Code, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

8.2.3 Spill Reporting

The permittee shall notify the Department in accordance with ch. NR 706 (formerly NR 158), Wis. Adm. Code, in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations established in this permit, or the spill or accidental release of the material is unregulated in this permit, unless the spill or release of pollutants has been reported to the Department in accordance with s. NR 205.07 (1)(s), Wis. Adm. Code.

8.2.4 Planned Changes

In accordance with ss. 283.31(4)(b) and 283.59, Stats., the permittee shall report to the Department any facility expansion, production increase or process modifications which will result in new, different or increased discharges of pollutants. The report shall either be a new permit application, or if the new discharge will not violate the effluent limitations of this permit, a written notice of the new, different or increased discharge. The notice shall contain a description of the new activities, an estimate of the new, different or increased discharge of pollutants and a description of the effect of the new or increased discharge on existing waste treatment facilities. Following receipt of

this report, the Department may modify this permit to specify and limit any pollutants not previously regulated in the permit.

8.2.5 Duty to Halt or Reduce Activity

Upon failure or impairment of treatment facility operation, the permittee shall, to the extent necessary to maintain compliance with its permit, curtail production or wastewater discharges or both until the treatment facility operations are restored or an alternative method of treatment is provided.

8.3 Surface Water Requirements

8.3.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit

For pollutants with water quality-based effluent limits below the Limit of Quantitation (LOQ) in this permit, the LOQ calculated by the permittee and reported on the Discharge Monitoring Reports (DMRs) is incorporated by reference into this permit. The LOQ shall be reported on the DMRs, shall be the lowest quantifiable level practicable, and shall be no greater than the minimum level (ML) specified in or approved under 40 CFR Part 136 for the pollutant at the time this permit was issued, unless this permit specifies a higher LOQ.

8.3.2 Appropriate Formulas for Effluent Calculations

The permittee shall use the following formulas for calculating effluent results to determine compliance with average concentration limits and mass limits and total load limits:

Weekly/Monthly/Six-Month/Annual Average Concentration = the sum of all daily results for that week/month/six-month/year, divided by the number of results during that time period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

Weekly Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the week.

Monthly Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the month.

Six-Month Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the six-month period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

Annual Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the entire year.

Total Monthly Discharge: = monthly average concentration (mg/L) x total flow for the month (MG/month) x 8.34.

Total Annual Discharge: = sum of total monthly discharges for the calendar year.

12-Month Rolling Sum of Total Monthly Discharge: = the sum of the most recent 12 consecutive months of Total Monthly Discharges.

8.3.3 Effluent Temperature Requirements

Weekly Average Temperature – The permittee shall use the following formula for calculating effluent results to determine compliance with the weekly average temperature limit (as applicable): Weekly Average Temperature = the sum of all daily maximum results for that week divided by the number of daily maximum results during that time period.

Cold Shock Standard – Water temperatures of the discharge shall be controlled in a manner as to protect fish and aquatic life uses from the deleterious effects of cold shock. 'Cold Shock' means exposure of aquatic organisms to a rapid decrease in temperature and a sustained exposure to low temperature that induces abnormal behavior or physiological performance and may lead to death.

Rate of Temperature Change Standard – Temperature of a water of the state or discharge to a water of the state may not be artificially raised or lowered at such a rate that it causes detrimental health or reproductive effects to fish or aquatic life of the water of the state.

8.3.4 Visible Foam or Floating Solids

There shall be no discharge of floating solids or visible foam in other than trace amounts.

8.3.5 Surface Water Uses and Criteria

In accordance with NR 102.04, Wis. Adm. Code, surface water uses and criteria are established to govern water management decisions. Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development or other activities shall be controlled so that all surface waters including the mixing zone meet the following conditions at all times and under all flow and water level conditions:

a) Substances that will cause objectionable deposits on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.

b) Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state.

c) Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state.

d) Substances in concentrations or in combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

9 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
SWPPP -Update SWPPP	September 30, 2023	26
WET Testing Protocol Determination -Submit WET Testing Plan	April 30, 2023	26
WET Testing Protocol Determination -Update WET Testing Protocol	September 30, 2023	26
End of Season Annual Summary -End of Season Annual Summary	September 30, 2022	26
End of Season Annual Summary -End of Season Annual Summary #2	September 30, 2023	26
End of Season Annual Summary -End of Season Annual Summary #3	September 30, 2024	26
End of Season Annual Summary -End of Season Annual Summary #4	September 30, 2025	26
End of Season Annual Summary -End of Season Annual Summary #5	September 30, 2026	26
End of Season Annual Summary -Ongoing End of Season Annual Summaries	See Permit	26
PFAS BMP Plan -Develop BMP Plan	December 31, 2022	27
PFAS BMP Plan -BMP Plan Implementation Status Report	September 30, 2023	27
PFAS BMP Plan -BMP Plan Implementation Status Report #2	September 30, 2024	27
PFAS BMP Plan -BMP Plan Implementation Status Report #3	September 30, 2025	27
PFAS BMP Plan -BMP Plan Implementation Status Report #4	September 30, 2026	27
PFAS BMP Plan -Ongoing BMP Status Reports	See Permit	27
Prohibited Discharge Inspections -Preliminary Prohibited Discharge Inspection Report	September 30, 2022	27
Prohibited Discharge Inspections -Prohibited Discharge Inspection Report	September 30, 2023	27
Prohibited Discharge Inspections -Prohibited Discharge Inspection Report #2	September 30, 2024	27
Prohibited Discharge Inspections -Prohibited Discharge Inspection Report #3	September 30, 2025	27
Prohibited Discharge Inspections -Prohibited Discharge Inspection Report #4	September 30, 2026	27
Prohibited Discharge Inspections -Ongoing Prohibited Discharge Inspections	See Permit	28
Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003, and 007) -Operational Evaluation Report	September 30, 2023	28
Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003, and 007) -Compliance Alternatives, Source Reduction, Improvements and Modifications Status	September 30, 2024	28
Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003,	March 31, 2025	28

and 007) -Preliminary Compliance Alternatives Plan		
Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003, and 007) -Final Compliance Alternatives Plan	September 30, 2025	29
Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003, and 007) -Progress Report on Plans & Specifications	March 31, 2026	29
Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003, and 007) -Final Plans and Specifications	September 30, 2026	29
Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003, and 007) -Upgrades to Meet WQBELs/WLAs	September 30, 2027	29
Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003, and 007) -Construction Upgrade Progress Report #1	March 31, 2028	29
Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003, and 007) -Construction Upgrade Progress Report #2	September 30, 2028	29
Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003, and 007) -Complete Construction	April 30, 2029	30
Water Quality Based Effluent Limits (WQBELs) for Phosphorus (001, 003, and 007) -Achieve Compliance	May 1, 2029	30
Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007) - Operational Evaluation Report	September 30, 2023	30
Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007) - Compliance Alternatives, Source Reduction, Improvements and Modifications Status	September 30, 2024	30
Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007) - Preliminary Compliance Alternatives Plan	March 31, 2025	31
Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007) - Final Compliance Alternatives Plan	September 30, 2025	31
Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007) - Progress Report on Plans & Specifications	March 31, 2026	31
Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007) - Final Plans and Specifications	September 30, 2026	31
Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007) - Upgrades to Meet WQBELs	September 30, 2027	31
Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007) - Construction Upgrade Progress Report #1	March 31, 2028	31
Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007) - Construction Upgrade Progress Report #2	September 30, 2028	32
Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007) - Complete Construction	April 30, 2029	32
Total Suspended Solids - TMDL Derived WQBELs for TSS (001 and 007) - Achieve Compliance	May 1, 2029	32

Wastewater Discharge Monitoring Report	no later than the date indicated on the form	33

Report forms shall be submitted electronically in accordance with the reporting requirements herein. Any facility plans or plans and specifications for municipal, industrial, industrial pretreatment and non industrial wastewater systems shall be submitted to the Bureau of Water Quality, P.O. Box 7921, Madison, WI 53707-7921. All other submittals required by this permit shall be submitted to:
South Central Region, 3911 Fish Hatchery Road, Fitchburg, WI 53711-5397